AMENDMENT TO THE CLAIMS:

Please **AMEND** claim 10 as follows.

A copy of all pending claims and a status of the claims are provided below.

1. (Previously Presented) A method for routing a datagram in an IP network, said method comprising the steps of:

a computer receiving a datagram with a destination network address;

a computer identifying a next hop router en route to or associated with said destination network address; and

a computer determining whether or not transmission of said datagram on a link to said next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with said next hop router, and

if not, updating the bandwidth usage associated with said next hop router, and transmitting said datagram to said next hop router,

if so, selecting among other possible next hop routers en route to or associated with said destination address, another next hop router for which transmission of said datagram on a link to said other next hop router would not result in a bandwidth usage exceeding a bandwidth threshold associated with said other next hop router, updating the bandwidth usage associated with said other next hop router, and transmitting said datagram to said other next hop router; and

a computer basing a routing decision on the bandwidth usage of the link to said next hop router and on a bandwidth usage as billed by an ISP on the links to said next hop routers,

wherein the bandwidth usage is a dynamic parameter which is updated in a forwarding information database (FIB) in real-time.

2. (Previously Presented) The method as set forth in claim 1, wherein the step of selecting comprises the steps of:

if, among said other possible next hop routers, there is no other next hop router for which the transmission of the datagram on the respective link would result in the bandwidth usage being less than the respective bandwidth threshold, choosing among said other possible next hop routers, another next hop router, updating the bandwidth threshold associated with said other, chosen next hop router with a larger, predefined bandwidth threshold; and

transmitting the datagram to said other, chosen next hop router.

3. (Previously Presented) A method for routing a datagram in an IP network, said method comprising the steps of:

a computer receiving a datagram with a destination network address;

a computer identifying a next hop router en route to or associated with said destination network address; and

a computer determining whether or not transmission of said datagram on a link to said next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with said next hop router, and

if not, updating the bandwidth usage associated with said next hop router, and transmitting said datagram to said next hop router,

if so, selecting among other possible next hop routers en route to or associated with said destination address, another next hop router for which transmission of said datagram on a link to said other next hop router would not result in a bandwidth usage exceeding a bandwidth threshold associated with said other next hop router, updating the bandwidth usage associated with said other next hop router, and transmitting said datagram to said other next hop router; and

a computer basing a routing decision on the bandwidth usage of the link to said next hop router,

wherein the bandwidth usage is a dynamic parameter which is updated in a forwarding information database (FIB) in real-time, and

wherein the step of determining, comprises the step of adding a bandwidth usage associated with said next hop router immediately before transmission of said datagram on said link to said next hop router to a bandwidth usage required for transmission of said datagram on said link to said next hop router, and comparing a result of said adding step to the bandwidth threshold associated with said next hop router.

4. (Original) The method as set forth in claim 1 wherein the step of updating the bandwidth usage associated with the first said next hop router, comprises the step of updating in a table, the current bandwidth usage with the estimated bandwidth usage.

5. (Cancelled)

6. (Cancelled)

7. (Original) The method as set forth in claim 2, wherein the step of choosing among said other possible next hop routers, comprises the step of choosing among said other possible next hop routers, a next hop router according to a shortest path algorithm.

8. (Original) The method as set forth in claim 1, wherein a bandwidth usage of a link to said next hop router is based on other datagrams that have been transmitted on said link within a time period prior to a current time.

9. (Previously Presented) A router for routing a datagram in an IP network, said router comprising:

a system receiving a datagram with a destination network address;

a system identifying a next hop router en route to or associated with said destination network address; and

a system determining whether or not transmission of said datagram on a link to said next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with said next hop router, and

if not, updating the bandwidth usage associated with said next hop router, and transmitting said datagram to said next hop router,

if so, selecting among other possible next hop routers en route to or associated with said destination address, another next hop router for which transmission of said datagram on a link to said other next hop router would not result in a bandwidth usage exceeding a bandwidth threshold associated with said other next hop router, updating the bandwidth usage associated with said other next hop router, and transmitting said datagram to said other next hop router,

wherein the router bases a routing decision on the bandwidth usage of the link to said next hop router and on a bandwidth usage as billed by an ISP on the links to the next hop routers,

wherein the bandwidth usage is a dynamic parameter which is updated in a forwarding information database (FIB) in real-time.

10. (Currently Amended) A computer program product for routing a datagram in an IP physical network utilizing router devices, said program product comprising:

a computer readable storage medium;

first program instructions to receive a datagram with a destination network address;

second program instructions to identify a next hop router en route to or associated with said destination network address; and

third program instructions to determine whether or not transmission of said datagram on a link to said next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with said next hop router, and

if not, updating the bandwidth usage associated with said next hop router, and transmitting said datagram to said next hop router,

if so, selecting among other possible next hop routers en route to or associated with said destination address, another next hop router for which transmission of said datagram on a link to said other next hop router would not result in a bandwidth usage exceeding a bandwidth threshold associated with said other next hop router, updating the bandwidth usage associated with said other next hop router, and transmitting said datagram to said other next hop router; and

wherein said first, second and third program instructions are recorded on said medium,

wherein a routing decision is based on the bandwidth usage of the link to said next hop router and on a bandwidth usage as billed by an ISP on the links to the next hop routers, and

wherein the bandwidth usage is a dynamic parameter which is updated in a forwarding information database (FIB) in real-time.

11. (Previously Presented) A computer program product as set forth in claim 10, wherein said third program instructions determine that transmission of said datagram on a link to said next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with said next hop router, and among said other possible next hop routers, there is not other next hop router for which the transmission of the datagram on the respective link would result in the bandwidth usage being less than the respective bandwidth threshold, and in response,

choose among said other possible next hop routers, another next hop router,

update the bandwidth threshold associated with said other, chosen next hop router with a larger, predefined bandwidth threshold; and

transmit the datagram to said other, chosen next hop router.

12. (Previously Presented) A router as set forth in claim 9, wherein the determining system determines that transmission of said datagram on a link to said next hop router would result in a bandwidth usage exceeding a bandwidth threshold associated with said next hop router,

and among said other possible next hop routers, there is no other next hop router for which the transmission of the datagram on the respective link would result in the bandwidth usage being less than the respective bandwidth threshold, and in response,

chooses among said other possible next hop routers, another next hop router,

updates the bandwidth threshold associated with said other, chosen next hop router with a larger, predefined bandwidth threshold; and

transmits the datagram to said other, chosen next hop router.

13. (Previously Presented) The method as set forth in claim 1, further comprising sending an IP datagram with an updated header to a selected next hop router and defining a current bandwidth for billing as an increasing function.

14. (Previously Presented) The method as set forth in claim 1, further comprising, at a beginning of a billing period, defining a current bandwidth threshold equal to a lowest value in a list of bandwidth thresholds.

15. (Previously Presented) The method as set forth in claim 1, further comprising, for each link to a next hop router, adding a minimum time to emit a next datagram, a list of bandwidth thresholds, a current bandwidth threshold, and a billing period in the FIB.

16. (Previously Presented) The method as set forth in claim 1, further comprising, for each link to a next hop router, utilizing a current bandwidth for billing, a list of bandwidth thresholds, a current bandwidth threshold, and a billing period to route traffic.

17. (Previously Presented) The router as set forth in claim 9, further comprising a system sending an IP datagram with an updated header to a selected next hop router and a system defining a current bandwidth for billing as an increasing function.

18. (Previously Presented) The router as set forth in claim 9, wherein, for each link to a next hop router, a minimum time to emit a next datagram, a list of bandwidth thresholds, a current bandwidth threshold, and a billing period is added in the FIB.

19. (Previously Presented) The router as set forth in claim 9, wherein, for each link to a next hop router, a current bandwidth for billing, a list of bandwidth thresholds, a current bandwidth threshold, and a billing period are utilized to route traffic.

20. (Previously Presented) The product as set forth in claim 10, wherein, at a beginning of a billing period, a current bandwidth threshold is defined equal to a lowest value in a list of bandwidth thresholds.

21. (Previously Presented) The product as set forth in claim 10, wherein, for each link to a next hop router, a minimum time to emit a next datagram, a list of bandwidth thresholds, a current bandwidth threshold, and a billing period is added in the FIB.

22. (Previously Presented) The product as set forth in claim 10, wherein, for each link to a next hop router, a current bandwidth for billing, a list of bandwidth thresholds, a current bandwidth threshold, and a billing period are utilized to route traffic.